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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,228	04/13/2005	Koichiro Nakazawa	03500.017656	4612

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EXAMINER	
SHAH, MANISH S	
ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/531,228	NAKAZAWA ET AL.	
	Examiner	Art Unit	
	Manish S. Shah	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 April 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/13;10/20;10/31*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to because the Figure: 2 is cut from bottom.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kubota et al. (# US 6086197).

Kubota et al. discloses:

- A recording method for performing recording on a recording medium (column: 2, line: 25-67) by applying on the recording medium a reaction liquid containing a polyvalent metal salt (column: 3, line: 60-67) and then applying thereon a pigment ink (column: 6, line: 50-67; column: 11, line: 60-67; column: 12, line: 1-15; see Examples), the method comprising the steps of: applying the pigment ink having a lower surface tension than that of the reaction liquid to the reaction liquid (see Table: 5, Reaction Solution C1 and Ink C4) applied on the top surface of the recording medium; and forming a filmy agglomerate compose of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with each other (see Abstract; column: 3, line: 45-55).

- A recording method for performing recording on a recording medium (column: 2, line: 25-67) using a pigment ink and a reaction liquid that has a higher surface

tension than that of the pigment ink (see Table: 5, Reaction Solution C1 and Ink C4) and contains a polyvalent metal salt (column: 3, line: 60-67) capable of agglomerating the pigment ink, the method comprising the steps of: applying the reaction liquid on the recording medium; and applying the reaction liquid on the recording medium so that the pigment ink is brought into contact with the reaction liquid that is present as liquid on the top surface of the recording medium (see Abstract; column: 3, line: 45-55).

- A recording method for performing recording on a recording medium (column: 2, line: 25-67) by applying on the recording medium a reaction liquid containing a polyvalent metal salt (column: 3, line: 60-67) and a surfactant and then applying thereon a pigment ink containing the surfactant at a content ratio higher than that in the reaction liquid, the method comprising the steps of: bringing the pigment ink into contact with the surface of the reaction liquid that is present on the top surface of the recording medium; and forming a filmy agglomerate composed of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with each other (see Abstract; column: 3, line: 45-55) .

- A recording method for performing recording on a recording medium (column: 2, line: 25-67) by applying a reaction liquid on the recording medium in advance and then applying a pigment ink thereon, the method comprising the steps of: bringing the reaction liquid into contact with the pigment ink on the top surface of the recording medium; forming a filmy agglomerate composed of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with each other; and

accelerating the penetration of the reaction liquid into the recording medium (see Abstract; column: 3, line: 45-55) .

- A recording method for forming an image on a recording medium (column: 2, line: 25-67) by applying on the recording medium a reaction liquid containing a polyvalent metal salt (column: 3, line: 60-67) and then applying thereon a pigment ink having a lower surface tension than that of the reaction liquid (see Table: 5, Reaction Solution C1 and Ink C4), the method comprising the steps of: bringing the reaction liquid into contact with the pigment ink on the top surface of the recording medium; and forming a firmly agglomerate composed of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with each other (see Abstract; column: 3, line: 45-55), wherein the solvent components of the ink and the reaction liquid are allowed to penetrate to form the agglomerate film that covers a plurality of fibers constituting the recording medium in such a manner as to cross over the plurality of fibers (column: 2, line: 25-67; see Abstract).

- A recorded product having an image formed on a recording medium consisting of a large number of fibers, wherein the image includes an agglomerate film that covers a plurality of fibers constituting the recording medium so as to cross over the plurality of fibers (see Abstract; column: 3, line: 45-55; column: see Examples).

- A recorded product having an agglomerate film formed on a recording medium consisting of a large number of fibers, wherein the agglomerate film covers a plurality of fibers so as to cross over the plurality of fibers (see Abstract; column: 3, line: 45-55; column: see Examples).

- A recorded product having an agglomerate film formed on a recording medium consisting of a large number of fibers, wherein the agglomerate film covers irregularities of a plurality of fibers so as to cross over the irregularities (see Abstract; column: 3, line: 45-55; column: see Examples).

2. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ono et al. (# US 6238045).

Ono et al. discloses:

- A recording method for performing recording on a recording medium (column: 5, line: 9-20) by applying on the recording medium a reaction liquid containing a polyvalent metal salt (column: 6, line: 20-30) and then applying thereon a pigment ink (column: 6, line: 50-67; column: 7, line: 20-67; see Examples), the method comprising the steps of: applying the pigment ink having a lower surface tension than that of the reaction liquid to the reaction liquid (see Abstract; column: 5, line: 15-40; column: 6, line: 45-55) applied on the top surface of the recording medium; and forming a filmy agglomerate compose of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with each other (see Abstract; column: 5, line: 5-35).

- A recording method for performing recording on a recording medium (column: 5, line: 9-20) using a pigment ink and a reaction liquid that has a higher surface tension than that of the pigment ink (see Abstract; column: 5, line: 15-40; column: 6, line: 45-55; see Examples) and contains a polyvalent metal salt (column: 6, line: 20-30) capable of

agglomerating the pigment ink (column: 6, line: 50-67; column: 7, line: 20-67; see Examples) , the method comprising the steps of: applying the reaction liquid on the recording medium; and applying the reaction liquid on the recording medium so that the pigment ink is brought into contact with the reaction liquid that is present as liquid on the top surface of the recording medium (see Abstract; column: 5, line: 5-45).

- A recording method for performing recording on a recording medium (column: 5, line: 9-20) by applying on the recording medium a reaction liquid containing a polyvalent metal salt (column: 6, line: 20-30) and a surfactant (see Examples) and then applying thereon a pigment ink (column: 6, line: 50-67) containing the surfactant at a content ratio higher than that in the reaction liquid (see Examples), the method comprising the steps of: bringing the pigment ink into contact with the surface of the reaction liquid that is present on the top surface of the recording medium; and forming a filmy agglomerate composed of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with each other (see Abstract; column: 3, line: 5-35) .

- A recording method for performing recording on a recording medium (column: 5, line: 9-20) by applying a reaction liquid on the recording medium in advance and then applying a pigment ink (column: 6, line: 50-67) thereon, the method comprising the steps of: bringing the reaction liquid into contact with the pigment ink on the top surface of the recording medium; forming a filmy agglomerate composed of collective aggregates at the interface between the reaction liquid and the pigment ink in contact

with each other; and accelerating the penetration of the reaction liquid into the recording medium (see Abstract; column: 3, line: 5-45) .

- A recording method for forming an image on a recording medium (column: 5, line: 9-20) by applying on the recording medium a reaction liquid containing a polyvalent metal salt (column: 6, line: 20-30) and then applying thereon a pigment ink having a lower surface tension than that of the reaction liquid (see Abstract; column: 5,line: 15-35; column: 6, line: 45-55), the method comprising the steps of: bringing the reaction liquid into contact with the pigment ink on the top surface of the recording medium; and forming a firmly agglomerate composed of collective aggregates at the interface between the reaction liquid and the pigment ink in contact with each other (see Abstract; column: 3, line: 5-35), wherein the solvent components of the ink and the reaction liquid are allowed to penetrate to form the agglomerate film that covers a plurality of fibers constituting the recording medium in such a manner as to cross over the plurality of fibers (see Examples; see Abstract).

- A recorded product having an image formed on a recording medium consisting of a large number of fibers, wherein the image includes an agglomerate film that covers a plurality of fibers constituting the recording medium so as to cross over the plurality of fibers (see Abstract; column: 3, line: 5-45; see Examples).

- A recorded product having an agglomerate film formed on a recording medium consisting of a large number of fibers, wherein the agglomerate film covers a plurality of fibers so as to cross over the plurality of fibers (see Abstract; column: 3, line: 5-55; see Examples).

- A recorded product having an agglomerate film formed on a recording medium consisting of a large number of fibers, wherein the agglomerate film covers irregularities of a plurality of fibers so as to cross over the irregularities (see Abstract; column: 3, line: 5-45; see Examples).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Manish S. Shah
Primary Examiner
Art Unit 2853

MSS
12/6/06